

Information Item

California Postsecondary Education Commission

Executive Director's Report, October 2000

Executive Director Warren Fox will discuss issues of mutual concern to the commissioners. Included in this report is information about the Science and Mathematics Preservice Partnership Program at California State University, Fresno which the Commission currently funds through the Eisenhower Professional Development State Grant Program.

Presenter: Warren H. Fox, Executive Director.



Report of the Executive Director

October 16, 2000

Introduction

Since 1985, the Commission has administered the Dwight D. Eisenhower Professional Development State Grant Program. This program, which is funded federally through the Elementary and Secondary Act (currently called the Improving America's Schools Act), provides grant funds to institutions of higher education and nonprofit organizations to work with elementary and secondary education faculty to improve both their content knowledge and pedagogy.

The Commission receives approximately \$6.5 million annually in federal funds to award in a competitive grant process. The program is primarily focused on improving mathematics and science education, but in the last authorization in 1994, seven new subject areas were added. Congress is currently considering reauthorization of the program. However, it appears that this process will not be complete before the end of the Congressional session this year. As a result, the program will likely continue unchanged for one more year, giving Congress additional time to discuss the issues involved and any potential program changes.

The Commission currently funds 32 programs that provide professional development opportunities for elementary and secondary teachers in California. Below is a summary of one such program serving teachers and prospective teachers in the Central Valley.

Science and Mathematics Preservice Partnership Program, California State University, Fresno

Beginning in February 1998, the Commission funded the Science and Mathematics Preservice Partnership Program (SMP3). This program is administered by California State University, Fresno in partnership with Fresno Unified School District. The program, which serves 90 elementary and middle school teachers at 64 schools in the Fresno area, as well as 180 preservice students, has three major goals:

- (1) To significantly increase both the quantity and quality of mathematics and science content coursework in the Liberal Subjects/multiple subject waiver degree program at CSU Fresno;
- (2) To dramatically increase the number and diversity of Liberal Studies/multiple-subject credential majors who choose to emphasize mathematics/science in the Liberal Studies degree; and
- (3) To strengthen the linkage between preservice teacher preparation and inservice teacher professional development in mathematics and science.

The major elements of the Science and Mathematics Preservice Partnership Program are preservice student recruitment, student support and incentives, faculty mentoring and student internships, Liberal Studies curriculum development, and mathematics and science content Summer Institutes for Fresno Unified School District. Some of the program activities involve increasing the required number of mathematics and science content courses in the Liberal Studies/multiple subject waiver program, creating writing teams of mathematicians and scientists as well as educators to develop new and improved mathematics and science content courses for the Liberal Studies major; establishing hiring priorities with Fresno Unified School District, providing year-long mentoring of preservice students by exemplary teacher leaders from Fresno Unified School District's Urban Systemic Initiative programs, and offer paid internships and mathematics and science content courses for preservice students.

The program serves three distinct groups of teachers and students. First are approximately 180 preservice students majoring in Liberal Studies and seeking the Multiple Subject Credential to become elementary and middle school teachers. The program teams these preservice students with approximately 90 kindergarten through sixth grade teachers who serve as mentors and who are also provided with the opportunity to take courses in mathematics and science. Additionally, 600 K-6 students are provided with mathematics and science instruction in conjunction with a summer institute held at Fresno Unified School District.

Preservice recruitment activities are carried out by the Liberal Studies Advising Office, Science Careers Opportunity Program, community college counselors, and mathematics and science faculty. Student support and incentives include stipends for attending Summer Institutes, book allowances during the academic year, tutoring, peer advising and counseling, and hiring priorities for successful graduates of the program.

Science faculty involved in the program are engaged in curriculum development of a new General Education integrated science sequence and Liberal Studies courses. Mathematics faculty are developing courses which incorporate best practices, including hands-on experiences, and concepts using mathematical tools. The courses will be piloted during the Summer Institutes.

The participating preservice students are placed as paid teacher aides in elementary classrooms under the supervision of mentor teachers. During the academic year, preservice students participate in teacher enrichment activities such as professional meetings and workshops. If these students are successful in their major and credential courses, they are placed in paid internships in school districts.

The outcomes identified by project leaders for the program are:

- (1) New university courses being developed, piloted, and institutionalized;
- (2) University mathematics and science faculty being trained to integrate high quality pedagogy in their instruction;

- (3) Significantly increasing the number of preservice students selecting mathematics and science as an emphasis in their degree program;
- (4) Preservice students being better prepared and accountable to meet the demands of teaching; and
- (5) Strengthening the cooperative relationship between CSU Fresno and Fresno Unified School District.

It is anticipated that the Project Directors for the Science and Mathematics Preservice Partnership Program will be available at the meeting to provide Commissioners with an update on the project's activities and report on their achievements to date.
